

132927

**Remarks**

Claims 1 - 24 were originally filed with the present application, and are currently pending herein.

The Office action states that claims 4, 7, 8, 11-14, 16, 17 and 19-22 are objected to as being dependent upon a rejected claim, but would be allowable if rewritten in independent form. This indication of allowable subject matter is gratefully acknowledged.

**Rejections Under 35 U.S.C. §102**

Claims 1, 2, 5, 6, 9, 10, 15, 16 and 18 are rejected under 35 U.S.C. §102(e) as being anticipated by US 6,846,565, to Korgel, *et al.* The rejection is traversed.

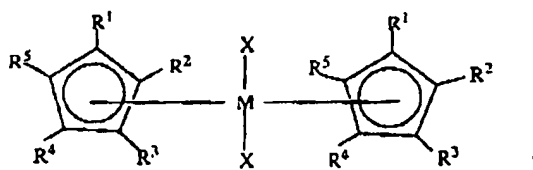
The Korgel patent relates to light emitting compositions containing nanoparticles that are produced by thermal degradation of a precursor molecule (Abstract). Exemplary precursor molecules include metallocenes; these are decomposed at high temperatures to form metal nanoparticles (col. 19, lines 48-57). In particular, the reference teaches that zirconocene dichloride may be decomposed to form zirconium nanoparticles (col. 19, lines 59-63). The Office action states that the reference discloses zirconocene dichloride as a nanoparticle that can be used as a light emitting nanoparticle in an emissive layer (page 2, paragraph 2). With respect, Applicants submit that the Office action mischaracterizes the teachings of the reference regarding the composition of the nanoparticles discussed at the bottom of column 19. In fact, the reference states, "Metallocenes may be decomposed by heating to high temperatures. When heated to high temperatures in the presence of a capping agent, and, optionally a solvent nanoparticles may be formed. . . Examples of metallocenes include, but are not limited to, ferrocene, cobaltocene, nickelocene, titanocene dichloride, zirconocene dichloride, and uranocene. *When decomposed these metallocenes may lead to iron, cobalt, nickel, titanium, zirconium, or uranium nanoparticles respectively* (emphasis added)." (col. 19, lines 54-63) It is clear from the text quoted that the reference does not teach metallocene nanoparticles, but rather, metal nanoparticles for use in light emitting compositions. Furthermore, it does not disclose an opto-electroactive device comprising a metallocene, as required by the claims. Accordingly, Applicants submit that claims 1, 2, 5, 6, 9, 10, 15, 16 and 18 are not anticipated by US 6,846,565. It is believed that the rejection is hereby overcome.

Claims 1, 3, 5, 6, 9, 15 and 18 are rejected under 35 U.S.C. §102(e) as being anticipated

132927

by US 2004/0058453, to Free, *et al.* The rejection is traversed.

US 2004/0058453 relates to reaction devices composed of a pouch and an analytical sensor for measurement of properties of materials within the pouch (Abstract). Example 4 of the Free application discloses operation of a device wherein the pouch contains ethylene-bis-indenyl zirconium dichloride, and the analytical sensor is a thermocouple (page 8, paragraph 0091). Temperature of the contents of the pouch was recorded as a function of time (*Id.*). Claim 1 of the instant application recites, "An opto-electroactive device comprising a metallocene of the formula



The term "opto-electroactive device" defines and limits the structure of the claimed device, distinguishing, for example, from a device that is merely electroactive, and so, limits the claim. US 2004/0058453 is silent regarding any opto-electroactive device that includes a metallocene. Accordingly, Applicants submit that claims 1, 3, 5, 6, 9, 15 and 18 are not anticipated by the reference. It is believed that the rejection is hereby overcome.

In view of the above, it is believed that claims 1-24 are patentable over the cited references. Applicants respectfully request allowance of all claims under consideration herein.

Respectfully submitted,

*Mary Louise Gioeni*  
 Mary Louise Gioeni  
 Attorney for Applicants  
 Reg. No. 41,779

Dated: February 14, 2006

General Electric Company  
 GE Global Research  
 1 Research Circle  
 Niskayuna, NY 12309  
 Phone (518) 387-6648  
 Fax (518) 387-7751